

LISTING OF CLAIMS:

The present listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A control unit for electric power steering, comprising:
motor driving means for energizing an electric motor to operate a steering mechanism secondarily;
motor current detecting means having an amplifier amplifying a voltage across a shunt resistor through which a motor current of said electric motor flows to output a current detection output indicating a value of said motor current; and
control means for implementing control so that a said current detection output obtained by said motor current detecting means reaches a target current value to said motor driving means determined on the basis of a steering torque in said steering mechanism;
temperature detecting means for detecting a temperature of said motor current detecting means; and
correction means for correcting ~~an~~ the current detection output of said motor current detecting means on the basis of an output of said temperature detecting means;
wherein said motor current detecting means is integrated in an integrated circuit package, and said temperature detecting means is integrated in said integrated circuit package so as to be situated in the vicinity of said amplifier of said motor current detecting means.

2. (Original) The unit according to claim 1, further comprising characteristic data storing means for storing output characteristic data on said motor current detecting means with respect to the output of said temperature detecting means, said correction means correcting the output of said motor current detecting means on the basis of the output of said temperature

detecting means and said output characteristic data on said motor current detecting means stored in said characteristic data storing means.

3. (Original) The unit according to claim 2, wherein said characteristic data storing means stores characteristic data obtained on the basis of the outputs of said motor current detecting means with respect to the outputs of said temperature detecting means under two or more temperature conditions.

4. (Original) The unit according to claim 2, wherein said characteristic data storing means is constructed with a data-rewritable non-volatile memory.

5. (Original) The unit according to claim 1, wherein said motor current detecting means and said temperature detecting means are arranged on the same semiconductor.

6. (Original) The unit according to claim 1, wherein said temperature detecting means is placed in the vicinity of said motor current detecting means.

7. (Original) The unit according to claim 5, wherein, on said semiconductor, said temperature detecting means is located in the close vicinity of said motor current detecting means.